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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,774	11/05/2001	Shigenori Morikawa	01711/LH	5900

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EXAMINER

WONG, BLANCHE

ART UNIT PAPER NUMBER

2667

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/991,774	Applicant(s) MORIKAWA, SHIGENORI	
	Examiner Blanche Wong	Art Unit 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2001.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-11 is/are rejected.
7) ☒ Claim(s) 12 and 13 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01, 02, 03, 04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

2. The drawings are objected to because Fig. 8B should start with "Communication Processing" as discloses in the Specification, p. 6.
3. The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. In Fig. 5, "1" is hanging because it does not connect to any other drawing.

Specification

4. The disclosure is objected to because of the following informalities:
 - On p. 1, ln. 13-14, it is unclear what is meant by "where at least accounting is carried by data amount".
 - On p. 1, ln. 16-17, it is unclear what is meant by "that makes a computer execute actions of such a data communication terminal".
 - On p. 5, it is unclear what is meant by the word "constitution" in the description of Fig. 1A, 1B, 2B, 6A.
 - On p. 6, ln. 1, Examiner suggests replacing -- former half -- with "first half".
 - On p. 10, ln. 25, Examiner suggest replacing -- "rest" -- with "reset".

Appropriate correction is required.

Claim Objections

5. With regard to cl. 7, ln. 9, Examiner suggests inserting the word "judging" to read "by judging whether or not the communication charge calculated by the calculating

means with respect to the transmitted/received data amount to be measured has reached the upper limit value of the communication charge” in consistent to “by judging whether or not the transmitted/received data amount has reached the specified data amount” in ln. 7-9.

6. With regard to cl. 11, ln. 3, Examiner suggest replacing – from among – with “between” because the selection is between two communication networks.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 1,3,4,8** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to cl. 1, ln. 7, it is unclear what is objective data.

With regard to cl. 3, ln. 2, it is unclear which data because there are “a data amount” in cl. 1, ln. 4; “a set of objective data” in cl. 1, ln. 7; “a specified data amount” in cl. 1, ln. 15; and “the transmitted/received data amount” in cl. 1, ln. 13-14 and ln. 16-17.

With regard to cl. 3, ln. 2, it is unclear what is plural packets, that is, whether there are two or more packets or whether data are one or more packets. It is also unclear how many is plural, if limitation is significant to the invention.

With regard to cl. 4, it is unclear what is sub data.

9. There is insufficient antecedent basis for this limitation in the claim.

- Claim 4 recites the limitation “the another set of objective data” in ln. 4.

- Claim 8 recites the limitation "the calculation" in ln. 5.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1,5,7,9,10** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGregor et al. (U.S. Pat No. 5,577,100)(provided by the Applicant) in view of Campbell (U.S. Pat No. 6,453,029).

With regard to cl. 1,9,10, McGregor discloses a data communication terminal 30 (mobile phone unit) comprising:

data communication means 66 (RF transceiver) for connecting to a communication network (mobile phone accounting system, col. 3, ln. 32) where accounting 12,14 (tracking and accounting unit; CPU) is made according to a data amount (a rental period or within period of polling, col. 4, ln. 43-44) to carry out data communication.

However, McGregor fails to explicitly show means for recognizing the start and the end of transmission/reception of a set of objective data to be transmitted/received; means for measuring data amount from the start to the end of transmission/reception of the set of objective data to be transmitted/received and to be recognized; means for judging whether or not the transmitted/received data amount to be measured has reached a

specified data amount; and means for, when it is judged that the transmitted received data amount has reached the specified data amount, warning a user to that effect.

In an analogous art, Campbell discloses (in a call processor 105, col. 6, ln. 23, during a prepaid communication)

means for recognizing (step 211, col. 7, ln. 41-43; it would have been obvious that in order to calculate the running charges to deduct, there is a way to keep track of the start and end of the call) the start and the end of transmission/reception of a set of objective data (call) to be transmitted/received;

means for measuring (step 211, col. 7, ln. 41-43; it would have been obvious that in order to calculate the running charges to deduct, there is a way to translate the call time to charges) data amount from the start to the end of transmission/reception of the set of objective data to be transmitted/received and to be recognized;

means for judging (based upon the account balance, col. 7, ln. 45-46) whether or not the transmitted/received data amount to be measured has reached a specified data amount (account balance); and

means for, when it is judged that the transmitted received data amount has reached the specified data amount, warning (step 212, col. 7, ln. 44) a user to that effect.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a call processor in a mobile phone accounting system. The

suggestion/motivation for doing so would have been to provide for a faster and more efficient system when the call processor is incorporated locally. Campbell, col. 2, ln. 4-8. Therefore, it would have been obvious to combine Campbell with McGregor for the benefit of a call processor in a mobile phone accounting system, to obtain the invention as specified in cl. 1, 9, 10.

With regard to cl. 10, McGregor further discloses computer readable recording medium 60, col. 5, ln. 24-26 and ln. 58-61.

With regard to cl. 5 and 7, the combination of McGregor and Campbell discloses a data communication terminal according to cl. 1. However, the combination fails to explicitly show means for optionally setting an upper limit value of the data amount with which a set of objective data to be transmitted/received can be transmitted/received continuously, wherein the judgment is made so that, when the set upper limit value is reached, the transmitted/received data amount has reached the specified data amount.

Campbell further discloses means for optionally (based upon the account balance, the rating plan and the type of connection, col. 7, ln. 45-46; it would have been obvious that the account balance, rating plan, are choices made by the caller) setting an upper limit value (initial account balance, col. 7, ln. 43) of the data amount. Additionally, Campbell discloses means for calculating communication charge according to the transmitted/received data amount (monitors the running charges for the call and deducts the amount from the initial account balance, col. 7, ln. 41-43).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include means for optionally setting an upper limit value of the data amount with which a set of objective data to be transmitted/received can be transmitted/received continuously, wherein the judgment is made so that, when the set upper limit value is reached, the transmitted/received data amount has reached the specified data amount. The suggestion/motivation for doing so would have been to provide for a faster and more efficient system when the call processor instead of the center system, can perform such function. Campbell, col. 2, ln. 4-8. Therefore, it would have been obvious to combine Campbell with McGregor for the benefit of a means for optionally setting an upper limit value of the data amount with which a set of objective data to be transmitted/received can be transmitted/received continuously, wherein the judgment is made so that, when the set upper limit value is reached, the transmitted/received data amount has reached the specified data amount, and means for calculating communication charge according to the transmitted/received data amount, to obtain the invention as specified in cl. 5 and 7.

12. **Claims 2 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGregor and Campbell as applied to claims 1,9,10 above, and further in view of Davitt et al. (U.S. Pat No. 6,137,872).

With regard to cl. 2, the combination of McGregor and Campbell disclose the data communication terminal according to cl. 1. However, the combination fails to

explicitly show an option to remove the temporarily suspension of transmission/reception.

In an analogous art, Davitt discloses means for, when it is judged (upon detecting a depleted pre-paid balance, col. 5, ln. 54) that the transmitted/received data amount has reached the specified data amount (pre-paid balance) and receiving an instruction to resume or terminate transmission/reception of the set of objective data from a user (the subscriber can choose manual or automatic treatment, col. 5, ln. 60, and if automatic, the subscriber is prompted to indicate whether to continue the call, col. 6, ln. 13-15), and resuming or terminating transmission/reception of the set of objective data according to the instruction (checks whether the subscriber entered a valid response to the prompt, col. 6, ln. 18-19).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include an option to remove the temporarily suspension of transmission/reception. The suggestion/motivation for doing so would have been to provide for flexibility to exceed a budgeted amount of service. Davitt, col. 2, ln. 24-25. Therefore, it would have been obvious to combine Davitt with the combination of McGregor and Campbell for the benefit of an option to remove the temporarily suspension of transmission/reception, to obtain the invention as specified in cl. 2.

With regard to cl. 6, the combination of McGregor and Campbell disclose the data communication terminal according to cl. 1. However, the combination fails to explicitly show temporarily increased.

In an analogous art, Davitt discloses temporarily increased (automatic overflow treatment can continue a call, col. 5, ln. 64-65).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include an option to remove the temporarily suspension of transmission/reception. The suggestion/motivation for doing so would have been to provide for flexibility to exceed a budgeted amount of service. Davitt, col. 2, ln. 24-25. Therefore, it would have been obvious to combine Davitt with the combination of McGregor and Campbell for the benefit of an option to remove the temporarily suspension of transmission/reception, to obtain the invention as specified in cl. 6.

13. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over McGregor and Campbell as applied to claim 1 above, and further in view of Baber et al. (U.S. Pat No. 6,658,485).

With regard to cl. 11, the combination of McGregor and Campbell discloses a data communication terminal 30 (in McGregor, mobile phone unit) comprising:

means for carrying out data communication 66 (in McGregor, via RF transceiver) by use of a communication network (in McGregor, mobile phone accounting system, col. 3, ln. 32);

means for setting a limit amount of communication-charge (in Campbell, initial account balance, col. 7, ln. 43);

means for calculating (in Campbell, monitors the running charges for the call and deducts the amount from the initial account balance, col. 7, ln. 41-43) communication

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charge required for data communication in real time manners according to the selected communication network;

means for judging (in Campbell, based upon the account balance, col. 7, ln. 45-46) whether or not the calculated communication charge has reached the limit amount of communication charge (account balance); and

means for, when it is judged that the calculated communication charge has reached the limit amount, warning (in Campbell, step 212, col. 7, ln. 44) a user to that effect.

However, the combination of McGregor and Campbell fails to explicitly show a communication network where accounting is made according to a data amount and a communication network where accounting is made according to connection time.

In an analogous art, Baber discloses a communication network where accounting is made according to a data amount (col. 2, ln. 60-61) and a communication network where accounting is made according to connection time (col. 2, ln. 66-col. 3, ln. 1).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a communication network where accounting is made according to a data amount and a communication network where accounting is made according to connection time. The suggestion/motivation for doing so would have been to provide for cost reduction by minimizing the duration of the network connection. Baber, col. 3, ln.

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2-3. Therefore, it would have been obvious to combine Baber with the combination of McGregor and Campbell for the benefit of a communication network where accounting is made according to a data amount and a communication network where accounting is made according to connection time, to obtain the invention as specified in cl. 11.

Allowable Subject Matter

14. Claims 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

BW
August 8, 2005



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8/19/05